UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/845,469	04/30/2001	Dejan S. Milojicic	10003509-1	3049

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HEWLETT-PACKARD COMPANY
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EXAMINER
IQBAL, NADEEM

ART UNIT	PAPER NUMBER
2114	

DATE MAILED: 01/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>30 April 2001</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-19</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) <u>9</u> is/are allowed.

6)☒ Claim(s) <u>1,2,5-8,10,11,14-16 and 19</u> is/are rejected.

7)☒ Claim(s) <u>3,4,12,13,17 and 18</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    . a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application)
since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.
37 CFR 1.78.

    a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific
reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

2.   This application currently names joint inventors. In considering patentability of the

claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

claims was commonly owned at the time any inventions covered therein were made absent any

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c)

and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3.   Claims 1, 2, 5-8, 10, 11, 14-16, & 19 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Vivio et al., (U.S. Patent number 5867642) in view of Hashiguchi et al., (U.S.

Patent number 5261084).

4.   As per claim 1, Vivio et al., (Vivio) teaches (col. 2, lines 60-63) a system management

controller that logs memory errors detected by an error detection and correction memory system.

He thus teaches limitations pertain to identifying a predetermined instruction sequence,

monitoring for memory access errors and logging errors. He does not explicitly disclose raising

exceptions if the memory access error is logged. Hashiguchi et al., teaches (col. 2, lines 27-29)

that when the data memory access error is detected, exceptional processing is automatically

executed. A person of ordinary skill in the art at the time the invention was made would have

been motivated to include to perform raising exceptions when memory access error is logged

into the invention of Vivio from the invention of Hashiguchi since Vivio teaches to log non-fatal

memory errors and clearly would have been desirable to perform exceptional processing for

other types of errors, thus providing motivation for a person of ordinary skill in the art for the

stated inclusion.

5.   As per claim 2, Vivio teaches (col. 2, lines 52-54) a system that dynamically remaps data

from a potentially faulty memory area to reserve memory area while maintaining memory

coherency. He thus teaches to provide checkpointing a set of system data and recovering from

the memory access error.

Allowable Subject Matter

6.   Claim 9 is allowed.

7.   Claims 3, 4, 12, 13, 17 & 18 are objected to as being dependent upon a rejected base

claim, but would be allowable if rewritten in independent form including all of the limitations of

the base claim and any intervening claims.

8.   As per claims 5 & 6, He also teaches (col. 2, lines 57-59) that his invention avoids errors

fro devices and applications that can not tolerate long delays in accessing memory, thus

providing masking a machine check abort handle.

9.   As per claim 7, Vivio already teaches (col. 2, lines 60-63) a system management

controller that logs memory errors detected by an error detection and correction memory system,

He thus would also update pointers.

10.   As per claim 8, Vivio teaches (col. 2, lines 55-57) to perform remapping of memory

without denying accesses to memory or interrupting applications for relatively long periods of

time, thus would allow re-executing the memory access request.

11.   As per claims 10 & 15, Vivio substantially teaches the claimed invention as disclosed

related to claim 1 above. He also teaches a system controller that logs memory errors detected by

an error detection and correction memory system. He thus teaches limitations pertain to

identifying a predetermined instruction sequence, monitoring for memory access errors and

logging errors. He does not explicitly disclose raising exceptions if the memory access error is

logged. Hashiguchi et al., teaches (col. 2, lines 27-29) that when the data memory access error is

detected, exceptional processing is automatically executed. A person of ordinary skill in the art

would have been motivated to include to perform raising exceptions when memory access error

is logged into the invention of Vivio from the invention of Hashiguchi since Vivio teaches to log

non-fatal memory errors and clearly would have been desirable to perform exceptional

processing for other types of errors, thus providing motivation for a person of ordinary skill in

the art for the stated inclusion.

12.   As per claims 11 & 16, Vivio teaches (col. 2, lines 52-54) a system that dynamically

remaps data from a potentially faulty memory area to reserve memory area while maintaining

memory coherency. He thus teaches to provide checkpointing a set of system data and

recovering from the memory access error.

13.   As per claim 19, He also teaches (col. 2, lines 57-59) that his invention avoids errors fro

devices and applications that can not tolerate long delays in accessing memory, thus providing
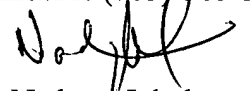
masking a machine check abort handle.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Nadeem Iqbal whose telephone number is (703)-308-5228. The

examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Robert W Beausoliel can be reached on (703)-305-9713. The fax phone number for

the organization where this application or proceeding is assigned is (703)-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703)-305-3900.

Nadeem Iqbal
Primary Examiner
Art Unit 2114

NI